

**FOOD CULTURE OF THE INTERNATIONAL STUDENTS AT  
OKLAHOMA STATE UNIVERSITY**

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Honors Thesis

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### ABSTRACT

**Background:** The purpose of this research was to gain a better understanding of international university students and their food ways when they enter the United States and the barriers they face when it comes to accessibility of food from their home country. This study focused on international students at Oklahoma State University.

**Objective:** Research Question: Does the food culture of Stillwater meet the needs of the international students at Oklahoma State University? Hypothesis: The food culture of Stillwater does meet the needs of the international students at Oklahoma State University.

**Design.** This was a cohort study. A survey created through *Qualtrics* (Qualtrics, Provo, UT) was sent out twice during the course of two weeks to identify the shift on food culture the international students face after they migrate to the United States.

**Participants/Setting:** The participants in this study were international students, freshman to graduate level, from Oklahoma State University. The students were from Africa, Asia, India, and the Middle East. The students completed the survey in their own time from cell phones or computers. The survey was open from April 13th to April 27th.

**Statistical Analyses Performed:** Statistical analyses were performed through *Qualtrics* (Qualtrics, Provo, UT), such as chi square, degrees of freedom, and the p-value.

**Results:** There were 86% of students who agreed that their eating habits have changed since migrating to the United States ( $p=0.00$ ). Over 68% of the students reported they consume more junk food and meat since coming to the US ( $p=0.00$ ). Only 9% ( $p=0.00$ ) of students reported they always cook their meals before coming to the US, while 60% ( $p=0.00$ ) of the students said they always cooked their own meals after coming to the US. Students also said they eat out more since coming to the United States (63%,  $p=0.00$ ). More than 50% ( $p=0.00$ ) of the participants said they have trouble finding food they like, but they also said there was no issue in understanding food choice at stores like Walmart Inc and Sprouts. Participants buy most of their groceries at Walmart Inc (46%,  $p=0.00$ ). Of the students surveyed, 50% of people said they shop at Walmart Inc for traditional foods, 25% said they shop at Himalayan Grocery Store, 5% said they shop at Crepe Myrtle Asian Market, and 5% said they shop at Sprouts.

**Conclusions:** Students reported that their diets had changed since migrating to the United States, evidenced by an increase of junk food consumption and a decrease of vegetable consumption. Students tend to cook more and eat out more after migrating to the US. Walmart Inc. appears to be a shopping center that keeps up with the demands of its ever-changing population, specifically for traditional foods from the students' home countries in this study. While students may find it hard to find the food they liked, it is not because they struggled to understand the food available in stores.

## INTRODUCTION

When migrating to the United States, immigrants such as international students face many different challenges. One of those challenges is adapting to new dietary patterns (Tovar, Must, Metayer, Gute, Pirie, & Hyatt, 2014). Other issues that contribute to this problem are access to certain food, confusion when grocery shopping, including greater exposure to fast food and language barriers after migrating to the United States (Akresh, 2007) (Burns, 2004) (Hadley, Zodhates, & Sellen, 2006). These problems may contribute to deterioration in health status, a higher BMI or food insecurity (Akresh, 2007) (Hadley Zodhates, & Sellen, 2006) (Tovar, Must, Metayer, Gute, Pirie, & Hyatt, 2014).

According to historian Massimo Montanari in his book *Food is Culture* and other studies, food culture is based on the way people produce, prepare and choose their food (Raine & Vallianatos, 2015) (Montanari, 2006). Food can take on symbolic form as way for people to express their identity. There are emotional attachments and comforts associated with food from home. In fact, research shows that food cultures are closely related to the identity of an individual and food from an immigrant's home country can provide ties to their communities while living in the United States (Raine & Vallianatos, 2015) (Turkon & Wellon, 2015). Historically, ethnic groups bring their traditional foods to the United States, changing the national food culture (Kulkarni, 2004).

Past research indicates that international students face barriers in obtaining food from their home country leading to shifts in food culture (Saidi, 2004) (Schley, 2003). Students report facing difficulty in adjusting to the culture of the United States due to limited access to food from their home country (Saidi, 2004) (Schley, 2003). This is an important topic to monitor because research shows the shift in food culture for internationals' migration to the US affects

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nutrition and overall health status (Gordon-Larsen, Ward, & Popkin, 2003). Having access to food from home may also assist students in the aculturation process when they choose to study in the United States.

Each region of the United States has its own distinct food culture. Oklahoma lies in the South region of the United States (Kittler, Nahikian-Nelms, & Sucher, 2012). This part of the US developed independently from the North, along with their taste in food (Kittler, Nahikian-Nelms, & Sucher, 2012). Stillwater, Oklahoma is not a metropolitan area, and 32% of Payne County's population lives in a food desert (LaVarnway & Craven, 2017). Since I grew up right next to Oklahoma, I have observed a lack of access to stores containing foods from cultures outside the southern region. Another observation I made was that towns may contain only a grocery store such as Walmart Inc. or a gas station with a small food selection.

Oklahoma State University had a total of 1,682 international students from 98 countries for the spring semester of 2018 (Oklahoma State University International Student Scholars, 2018). Previous studies have been done to explore the food culture of Stillwater, Oklahoma and the campus of Oklahoma State University in relation to the international students (Saidi, 2004) (Schley, 2003).

I have observed a shift in the way people grocery shop and the diversity of food choice in Stillwater since these studies were done, and thus the information should be updated. This research is important because food can soften the acculturation process for immigrants, and could assist the International Student Office in helping international students' acculturation at OSU (Raine & Vallianatos, 2015).

The purpose of this research is to better understand the food culture shift of the

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international students at Oklahoma State University. The question asked is: Does the food culture of Stillwater meet the needs of the international students at Oklahoma State University?

The study will evaluate the barriers international students face when it comes to accessibility of food from their home country and the perceived access to food from their home country in the community of Stillwater, Oklahoma.

## **METHODS**

### **Study Population**

This study, to evaluate the shift in food culture of international students from Oklahoma State University, was designed as a cohort study. Well over two-thirds of the 1,600 plus international students are students from Africa, Asia, the Middle East, and India (Oklahoma State University International Student Scholars, 2018).

The inclusion criteria for this study were (a) International Students studying at Oklahoma State University from Africa, Asia, the Middle East, and India (two students from Central America responded and are included in the results and (b) for undergraduate (freshman, sophomore, junior, and senior) to graduate students.

After obtaining consent, students were asked to complete an online survey to evaluate their feelings and attitude toward the shift in food culture they faced when transitioning to Stillwater, Oklahoma. They were also asked to evaluate their experience within the Stillwater community concerning access to food from their home country. The study was approved by the Oklahoma State Institutional Review Board (See Appendix 1).

### **Recruitment and Survey Procedures**

The primary recruitment method was via email sent out through the International Student Office at Oklahoma State University. The second method was through personal contacts. This

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method was used to talk to presidents of the international clubs to present at their club meetings. They received an email asking permission to attend the meeting to present. Finally, the snowball method was used as people were encouraged to ask friends to complete the survey.

The initial email sent out through the International Student Office contained a link to the survey. An anonymous link was created through *Qualtrics* (Qualtrics, Provo, UT) to insure privacy. There was a second email sent out to remind the students to take the survey. The students were given two weeks to complete the survey or until there were 50 responses to the survey. The data was then stored on a password-protected computer in the form of a Microsoft Excel (Microsoft® Excel® for Mac 2011, Version 14.7.2 (170228)) document in Human Sciences.

A literature review was done to find studies and surveys to identify questions to use for the survey. The studies' survey questions used were: (a) *Dietary Assimilation and Health among Hispanic Immigrants to the United States* (Akresh, 2007), (b) *Strategic choices in dietary acculturation: the case of international students at Oklahoma State University* (Saidi, 2004) and (c) *Effects of traditional food unavailability on Asian International student's diets* (Schley, 2003).

The survey contained 33 multiple choice and free response questions (see survey, Appendix 2). After review and revision of the survey questions by the investigator and her advisor, the survey was entered in to *Qualtrics* (Qualtrics, Provo, UT). After the online survey was created, it was pilot study tested on two students, one from China and one from India. Both of the students provided corrections to ensure clarity for other students who would take the survey.

## **Statistics**



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A Chi Square, Degrees of Freedom was calculated for each question are reported in the appendix (Appendix 3). The  $p$ -value for all the questions was  $p=0.00$ . Cross tabulations were run for each question to receive the results through *Qualtrics* (Qualtrics, Provo, UT).

## **RESULTS**

After the survey was distributed, there were 22 total completed responses, and 3 people did not answer where their home country was. A complete summary of the answers from the survey is available in the appendix (Appendix 3).

### **Demographics**

There were representatives from each of the OSU colleges (7). The majority of the students came from the College of Arts and Sciences (27%) and the Spears School of Business (27%). Students ranged in age of from 18-45 years old. Over 40% of the students were aged 26-30 years old. Females represented 59% of the participants, and males represented 41% of the participants. Over 80% of the students have lived in the US for more than one year with 40% having lived in the US for more than 5 years. Concerning relationship status, 70% of the students answered single and the rest answered married. Over 80% of the students who answered the survey were graduate students, and the rest were undergraduate students. The home countries of the students were as follows: Guatemala-1, India-3, Indonesia-1, Iran-1, Iraq-1, Korea-3, Kuwait-1, Sierra Leone-1, Malaysia-1, Mexico-1, Saudi Arabia-1, Taiwan-1, Thailand-2, Vietnam-1, and choose not to answer-3.

### **Changes in Eating Behavior**

There were 86% of students who agreed that their eating habits have changed since migrating to the United States ( $p=0.00$ ). Over 68% of the students consumed more junk food and meat since coming to the United States ( $p=0.00$ ). However, 59% of the students said they eat

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fewer vegetables since coming to the United States ( $p=0.00$ ). Only 9% ( $p=0.00$ ) of people said they always cook their meals before coming to the US while 60% ( $p=0.00$ ) of the students said they cooked their own meals always after coming to the US. People also said they eat out more since coming to the United States (63%,  $p=0.00$ ).

### Shopping Questions

More than 50% ( $p=0.00$ ) of the participants reported they have trouble finding food they like, but they also said there was no issue in understanding food choice at stores like Walmart Inc. and Sprouts. People often buy of their groceries at Walmart Inc. (31%,  $p=0.00$ ), Sprouts (23%,  $p=0.00$ ), and ALDI (23%,  $p=0.00$ ). None of the students reported regularly grocery shopping at Himalayan Grocery Store, and only one student reported that they regularly shop at Crepe Myrtle Asian Market. When asked about where the students shopped for traditional foods from their home country, the results were as follows: 31% of people reported they shop at Walmart Inc. most for traditional foods, 13% reported Sprouts, 9% reported Himalayan International Market, and 9% reported Crepe Myrtle Asian Market (Table 1).

How often would you go to one of these stores if you were looking for traditional food items from your home country?		Walmart Inc.	Sprouts	Himalayan Grocery Store	Crepe Myrtle Asian Market	Mi Carmelita's Mexican Store	ALDI	Food Pyramid	Other
-	Never	5	4	8	8	17	10	8	4
	Rarely	1	9	3	1	1	5	6	0
	Occasionally	4	3	4	4	0	2	3	0
	Often	7	3	2	2	0	2	2	1

Table 1: When asked where students most often shop for traditional foods 31% of students reported they shop at Walmart Inc, 13% reported Sprouts 9% reported Himalayan Grocery Store, and 9% reported Crepe Myrtle Asian Market.

**DISCUSSION**

According to the students who took the survey, their diet has changed but not in terms of how often they eat. Dietary habits have changed in terms of how many vegetables are eaten and how much junk food is consumed. In a study done at the University of Illinois, the researcher found that Hispanic immigrants faced similar changes in diet such as eating more junk food and meat (Akresh, 2007).

A surprising result from this study was that students said Walmart Inc. was a place over half of them shopped for their traditional foods. According to an article from the Journal of Business Case Studies, Walmart Inc. implements a concept called Total Quality Management that can provide some explanation for these results (Mujtaba & Maxwell, 2011). In this business model, businesses are constantly looking for new products from suppliers around the world. Not only are they focused on improving the quality of the goods sold; they work to improve the variety of the goods sold. They will choose products to sell based on a specific population as well (Mujtaba & Maxwell, 2011). The results in this study showed that Walmart Inc. was meeting the needs of the international student population perhaps because Walmart Inc. follows the TQM concept where they are constantly looking for new ways to provide products for their customers.

Another surprising result was that the number of international students who always cooked at home in their home country versus the number of people who always cook now that they are in the United States increased over 600%. One study done on a global scale, showed that fewer adults in India (less than half) cook at home than in the United States (The Organization for Economic Co-operation and Development, 2011). While this trend was not explained, it is an interesting comparison to the results found in this study since the largest number of students who

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took the survey came from India. Even though the number people who cooked for themselves increased, the number of people who ate out also increased. A speculation for this discovery is that many students did not cook for themselves until they came to the United States. The question who prepared the food in the students' home country was not explored, and thus further research should be done to add to this explanation.

According to this survey, international students found it difficult to find stores with the food they like, but not because they do not understand the options available to them. These results are not consistent with aforementioned studies. In one study immigrants reported struggles during shopping because they did not understand what the food options were that were available to them (Hadley Zodhates, & Sellen, 2006). One of the reasons the results varied could have been the population. In this study the population was international students at Oklahoma State University versus the other study where the participants were Western African refugees living in the north-eastern USA (Hadley Zodhates, & Sellen, 2006).

## **LIMITATIONS**

Limitations to the study are as follows: the small population of Stillwater, Oklahoma; the small pool of participants; the generalizations from this study may not be right for other towns; the population studied may not be varied enough.

## **CONCLUSION**

Based on the results of this study, the eating habits of international students at Oklahoma State University changed after coming to the US by an increase of junk food consumption and a decrease in vegetable consumption. The students tend to eat out more, and they cook more often in the United States compared to home. Walmart Inc. is keeping up with the changing population by increasing the variety of their goods sold based on customer population. Students claimed that

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they found it hard to find the foods they like, but not because they did not understand their food choices. More research should be done in this area to determine the cause of why students found it hard to find the foods they liked.

## **RECOMMENDATIONS**

Based on the results of this study, recommendations to International Student Organization at Oklahoma State University are to (a) speak with the manager of Walmart Inc. about making sure there is enough variety in the foods they sell, (b) speak with transportation service about providing more information in getting to Himalayan Grocery Store and Crepe Myrtle Asian Market and (c) speak with RHA about making cooking spaces in the dorms more accommodating (e.g., provide a wok for international students to use).

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## APPENDIX 1



### Oklahoma State University Institutional Review Board

Date: 04/03/2018  
 Application Number: HS-18-14  
 Proposal Title: Food Culture of the International Students at Oklahoma State University

Principal Investigator: Allison Strawn  
 Co-Investigator(s):  
 Faculty Adviser: TAY KENNEDY  
 Project Coordinator:  
 Research Assistant(s):

Processed as: Exempt

#### Status Recommended by Reviewer(s): Approved

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The IRB application referenced above has been approved. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in section 45 CFR 46.

The final versions of any recruitment, consent and assent documents bearing the IRB approval stamp are available for download from IRBManager. These are the versions that must be used during the study.

As Principal Investigator, it is your responsibility to do the following:

1. Conduct this study exactly as it has been approved. Any modifications to the research protocol must be approved by the IRB. Protocol modifications requiring approval may include changes to the title, PI, adviser, other research personnel, funding status or sponsor, subject population composition or size, recruitment, inclusion/exclusion criteria, research site, research procedures and consent/assent process or forms.
2. Submit a request for continuation if the study extends beyond the approval period. This continuation must receive IRB review and approval before the research can continue.
3. Report any unanticipated and/or adverse events to the IRB Office promptly.
4. Notify the IRB office when your research project is complete or when you are no longer affiliated with Oklahoma State University.

Please note that approved protocols are subject to monitoring by the IRB and that the IRB office has the authority to inspect research records associated with this protocol at any time. If you have questions about the IRB procedures or need any assistance from the Board, please contact the IRB Office at 223 Scott Hall (phone: 405-744-3377, [irb@okstate.edu](mailto:irb@okstate.edu)).

Sincerely,

A handwritten signature in black ink, appearing to read 'Hugh Crethar'.

Hugh Crethar, Chair Institutional  
 Review Board

## APPENDIX 2

Project title: Food Culture of the International Students at Oklahoma State University

Investigators:

Principal Investigator: Allison Strawn

Faculty Advisor: Dr. Tay Kennedy

Purpose:

The purpose of this study is to update and gather information about the food culture of International Students while studying at Oklahoma State University.

If you are being asked to participate it is because you are registered as an International Student from the Middle East, Africa, Asia, or India.

The type of information being sought is the feeling and experiences of the International Students concerning food culture during their time at Oklahoma State.

Procedures:

You will be asked to participate in a survey that has an estimated duration time of 5-10 minutes.

Risk of Participation:

There are no known risks associated with this project which are greater than those ordinarily encountered in daily life.

Benefits:

There are no expected benefits.

Confidentiality:

The data will be anonymously stored in the Qualtrics account.

The principle investigator and the faculty advisor will have access to the data.

The data will be kept in Qualtrics until May 29th.

The data will be reported and presented as a Thesis to the honors college. Data will also be reported to the International Student office for their use to enhance the experience of International Students.

There are no foreseeable risks to maintain confidentiality.

Compensation:

There is no compensation.

Contacts:

Should there be any questions or concerns about research or subject' rights please feel free to contact:

Principle Investigator:

Allison Strawn: astrawn@okstate.edu, 417-4995429

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Faculty Advisor:

Dr. Tay Kennedy: tay.kennedy@okstate.edu

If you have questions about your rights as a research volunteer, you may contact the IRB Office at 223 Scott Hall, Stillwater, OK 74078, 405-744-337 or [irb@okstate.edu](mailto:irb@okstate.edu)

Participant Rights:

Participation in the survey is completely voluntary and subjects have the right to discontinue the research activity at any time without reprisal or penalty. There are no risks that should occur due to withdraw.

I have read and fully understand the consent form. I sign it freely and voluntarily. I can request a copy of this form at any time from the principle investigator or faculty adviser.

Block 1:

This first section contains a list of questions to explore your eating habits since coming to the United States. You have several different options when answering the questions. Although Stillwater may not be your first stop within the United States, this survey focuses on OSU and the Stillwater community. Please take your time.

Q1: My eating habits have changed since I came to the US.

Strongly disagree

Disagree

Somewhat disagree

Neither agree nor disagree

Somewhat agree

Agree

Strongly agree

Q2: The number of meals I consume daily has decreased, increased, or stayed the same.

Decreased

Increased

Stayed the same

Q3: I eat more meat since coming to OSU.

Strongly disagree

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Disagree

Somewhat disagree

Neither agree nor disagree

Somewhat agree

Agree

Strongly agree

Q4: I eat more vegetables since coming to OSU.

Strongly disagree

Disagree

Somewhat disagree

Neither agree nor disagree

Somewhat agree

Agree

Strongly agree

Q5: I eat out more often since coming to the US (i.e. Chilies, Nikki's Greek Restaurant, Cafe 88, Eskimo Joes, or Hideaway).

Strongly disagree

Disagree

Somewhat disagree

Neither agree nor disagree

Somewhat agree

Agree

Strongly agree

Q6: I have difficulties in adapting to new foods/diets at OSU.

Strongly disagree

Disagree

Somewhat disagree

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Neither agree nor disagree

Somewhat agree

Agree

Strongly agree

Block 2:

This section of questions explore your shopping experiences in Stillwater, Oklahoma. Questions concern the problems you face when shopping and where you shop the most.

Q7: I find it difficult to find stores with the food I like.

Strongly disagree

Disagree

Somewhat disagree

Neither agree nor disagree

Somewhat agree

Agree

Strongly agree

Q 8: I find it difficult to shop in Stillwater at stores such as Walmart or Sprouts because I do not know all the different food in stores.

Strongly disagree

Disagree

Somewhat disagree

Neither agree nor disagree

Somewhat agree

Agree

Strongly agree

Q9: Where would you say you most often buy your groceries?

Walmart

Sprouts

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Himalayan Grocery Store

Crepe Myrtle Asian Market

Mi Carmelita's Mexican Store

ALDI

Food Pyramid

Other:

Q10: How often would you go to one of these stores if you were looking for traditional food items from your home country?

Walmart      Never   Rarely   Occasionally   Often   Always

Sprouts Never   Rarely   Occasionally   Often   Always

Himalayan Grocery Store      Never   Rarely   Occasionally   Often   Always

Crepe Myrtle Asian Market      Never   Rarely   Occasionally   Often   Always

MI Carmelita's Mexican Store   Never   Rarely   Occasionally   Often   Always

ALDI   Never   Rarely   Occasionally   Often   Always

Food Pyramid   Never   Rarely   Occasionally   Often   Always

Other:   Never   Rarely   Occasionally   Often   Always

Never   Rarely   Occasionally   Often   Always

Block 3:

The purpose of this section is to understand your experiences when it comes to cooking food from your home country.

Q11: Did you cook your own meals before coming to the US?

Never

Sometimes

About half the time

Most of the time

Always

Q12: About how many meals did you cook at home before coming to the US?

0-20%

21-40%

41-60%

61-80%

81-100%

Q13: Do you cook your own meals after coming to the US?

Never

Sometimes

About half the time

Most of the time

Always

Q14: About how many of your meals do you cook at home now?

0-20%

21-40%

41-60%

61-80%

81-100%

Q15: Do you feel that it takes a lot of time and trouble to prepare your everyday traditional meals in Stillwater?

Never

Sometimes

About half the time

Most of the time

Always

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Q16: Do you or your family prepare traditional foods generally served in your home country for traditional celebrations after coming to the United States?

Never

Sometimes

About half the time

Most of the time

Always

Q17: Please list any foods you might prepare and the holidays with which they are associated

Block 3: This section includes questions which are open response. Please feel free to express any thoughts you felt were not addressed in this survey.

Q18: Please tell me the most important food or dish that you regularly ate before coming to the US that you rarely eat now.

Open response

Q19: Please tell me the most important food or dish you eat a lot now that you rarely ate before you came to the US.

Open response

Demographics:

Q20: Years living in the US

0 months-1 year

1-2 years

2-5 years

more than 5 years

Q21: Gender

Male



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Female

Prefer not to answer

Q22: Martial Status

Single

Married

Divorced

Widowed

Q22: Age

18-20

21-25

26-30

31-35

35-40

41-45

46-50

Older than 50

Q23: Class Status

Freshman

Sophomore

Junior

Senior

Graduate Student

Q24: College

Agricultural Sciences and Natural Resources

Arts and Sciences

Education, Health and Aviation

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Engineering, Architecture and Technology

Human Sciences

Spears School of Business

University College


Q25: What is your country of origin?

Open response

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## APPENDIX 3


		My eating habits have changed since I came to OSU.							Total
		strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree	
My eating habits have changed since I came to OSU.	strongly disagree	0	0	0	0	0	0	0	0
	Disagree	0	2	0	0	0	0	0	2
	Somewhat disagree	0	0	1	0	0	0	0	1
	Neither agree nor disagree	0	0	0	0	0	0	0	0
	Somewhat agree	0	0	0	0	9	0	0	9
	Agree	0	0	0	0	0	4	0	4
	Strongly agree	0	0	0	0	0	0	6	6
Total		0	2	1	0	9	4	6	22

 Add Banner

		My eating habits have changed since I came to OSU.
My eating habits have changed since I came to OSU.	Chi Square	88.00*
	Degrees of Freedom	36
	p-value	0.00

\*Note: The Chi-Square approximation may be inaccurate - expected frequency less than 5.

		The number of meals I consume daily has decreased, increased, or stayed the same.			Total
		decreased	increased	stayed the same	
The number of meals I consume daily has decreased, increased, or stayed the same.	decreased	6	0	0	6
	increased	0	5	0	5
	stayed the same	0	0	11	11
	Total	6	5	11	22

 Add Banner

		The number of meals I consume daily has decreased, increased, or stayed the same.
The number of meals I consume daily has decreased, increased, or stayed the same.	Chi Square	44.00*
	Degrees of Freedom	4
	p-value	0.00

\*Note: The Chi-Square approximation may be inaccurate - expected frequency less than 5.

## Running head: FOOD AND INTERNATIONAL STUDENTS

Saving Data

		I consume more junk food since coming to OSU.							Total
		Strongly Disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree	
I consume more junk food since coming to OSU.	Strongly Disagree	1	0	0	0	0	0	0	1
	Disagree	0	2	0	0	0	0	0	2
	Somewhat disagree	0	0	2	0	0	0	0	2
	Neither agree nor disagree	0	0	0	2	0	0	0	2
	Somewhat agree	0	0	0	0	5	0	0	5
	Agree	0	0	0	0	0	6	0	6
	Strongly agree	0	0	0	0	0	0	4	4
Total		1	2	2	2	5	6	4	22

Add Stub

		I consume more junk food since coming to OSU.
I consume more junk food since coming to OSU.	Chi Square	132.00*
	Degrees of Freedom	36
	p-value	0.00

\*Note: The Chi-Square approximation may be inaccurate - expected frequency less than 5.

Saving Data

		I eat more meat since coming to OSU.							Total
		Strongly Disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree	
I eat more meat since coming to OSU.	Strongly Disagree	2	0	0	0	0	0	0	2
	Disagree	0	2	0	0	0	0	0	2
	Somewhat disagree	0	0	1	0	0	0	0	1
	Neither agree nor disagree	0	0	0	5	0	0	0	5
	Somewhat agree	0	0	0	0	2	0	0	2
	Agree	0	0	0	0	0	7	0	7
	Strongly agree	0	0	0	0	0	0	3	3
Total		2	2	1	5	2	7	3	22

Add Stub


		I eat more meat since coming to OSU.
I eat more meat since coming to OSU.	Chi Square	132.00*
	Degrees of Freedom	36
	p-value	0.00

\*Note: The Chi-Square approximation may be inaccurate - expected frequency less than 5.

## Running head: FOOD AND INTERNATIONAL STUDENTS

		I eat more vegetables since coming to OSU.							Total
		Strongly Disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree	
I eat more vegetables since coming to OSU.	Strongly Disagree	3	0	0	0	0	0	0	3
	Disagree	0	7	0	0	0	0	0	7
	Somewhat disagree	0	0	3	0	0	0	0	3
	Neither agree nor disagree	0	0	0	5	0	0	0	5
	Somewhat agree	0	0	0	0	2	0	0	2
	Agree	0	0	0	0	0	1	0	1
	Strongly agree	0	0	0	0	0	0	1	1
Total		3	7	3	5	2	1	1	22

 Add B

 Add Stub

		I eat more vegetables since coming to OSU.
I eat more vegetables since coming to OSU.	Chi Square	132.00*
	Degrees of Freedom	36
	p-value	0.00

		I eat out more often since coming to the US (i.e. Chilies, Nikki's Greek Restaurant, Cafe 88, Esk...							Total
		Strongly Disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree	
I eat out more often since coming to the US (i.e. Chilies, Nikki's Greek Restaurant, Cafe 88, Esk...	Strongly Disagree	1	0	0	0	0	0	0	1
	Disagree	0	4	0	0	0	0	0	4
	Somewhat disagree	0	0	1	0	0	0	0	1
	Neither agree nor disagree	0	0	0	2	0	0	0	2
	Somewhat agree	0	0	0	0	5	0	0	5
	Agree	0	0	0	0	0	2	0	2
	Strongly agree	0	0	0	0	0	0	7	7
Total		1	4	1	2	5	2	7	22

 Add Stub

		I eat out more often since coming to the US (i.e. Chilies, Nikki's Greek Restaurant, Cafe 88, Esk...
I eat out more often since coming to the US (i.e. Chilies, Nikki's Greek Restaurant, Cafe 88, Esk...	Chi Square	132.00*
	Degrees of Freedom	36
	p-value	0.00

## Running head: FOOD AND INTERNATIONAL STUDENTS

Summary Table

		I have difficulties in adapting to new foods/diets at OSU.							Total
		Strongly Disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree	
I have difficulties in adapting to new foods/diets at OSU.	Strongly Disagree	2	0	0	0	0	0	0	2
	Disagree	0	4	0	0	0	0	0	4
	Somewhat disagree	0	0	4	0	0	0	0	4
	Neither agree nor disagree	0	0	0	5	0	0	0	5
	Somewhat agree	0	0	0	0	4	0	0	4
	Agree	0	0	0	0	0	3	0	3
	Strongly agree	0	0	0	0	0	0	0	0
Total		2	4	4	5	4	3	0	22

Add Ba


Add Stub

		I have difficulties in adapting to new foods/diets at OSU.
I have difficulties in adapting to new foods/diets at OSU.	Chi Square	110.00*
	Degrees of Freedom	36
	p-value	0.00

\*Note: The Chi-Square approximation may be inaccurate - expected frequency less than 5.

## Running head: FOOD AND INTERNATIONAL STUDENTS


		I find it difficult to find stores with the food I like.							
		Strongly Disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree	Total
I find it difficult to find stores with the food I like.	Strongly Disagree	1	0	0	0	0	0	0	1
	Disagree	0	3	0	0	0	0	0	3
	Somewhat disagree	0	0	4	0	0	0	0	4
	Neither agree nor disagree	0	0	0	1	0	0	0	1
	Somewhat agree	0	0	0	0	5	0	0	5
	Agree	0	0	0	0	0	5	0	5
	Strongly agree	0	0	0	0	0	0	3	3
Total		1	3	4	1	5	5	3	22

 Add Stub

		I find it difficult to find stores with the food I like.
I find it difficult to find stores with the food I like.	Chi Square	132.00*
	Degrees of Freedom	36
	p-value	0.00

\*Note: The Chi-Square approximation may be inaccurate - expected frequency less than 5.

		I find it difficult to shop in Stillwater at stores such as Walmart or Sprouts because I do not...							
		Strongly Disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree	Total
I find it difficult to shop in Stillwater at stores such as Walmart or Sprouts because I do not...	Strongly Disagree	6	0	0	0	0	0	0	6
	Disagree	0	8	0	0	0	0	0	8
	Somewhat disagree	0	0	5	0	0	0	0	5
	Neither agree nor disagree	0	0	0	0	0	0	0	0
	Somewhat agree	0	0	0	0	2	0	0	2
	Agree	0	0	0	0	0	1	0	1
	Strongly agree	0	0	0	0	0	0	0	0
Total		6	8	5	0	2	1	0	22

 Add Stub

		I find it difficult to shop in Stillwater at stores such as Walmart or Sprouts because I do not...
I find it difficult to shop in Stillwater at stores such as Walmart or Sprouts because I do not...	Chi Square	88.00*
	Degrees of Freedom	36
	p-value	0.00

## Running head: FOOD AND INTERNATIONAL STUDENTS

		Where would you say you most often buy your groceries?								Total
		Walmart	Sprouts	Himalayan Grocery Store	Crepe Myrtle Asian Market	Mi Carmelita's Mexican Store	ALDI	Food Pyramid	Other	
Where would you say you most often buy your groceries?	Walmart	10	0	0	0	0	0	0	0	10
	Sprouts	0	5	0	0	0	0	0	0	5
	Himalayan Grocery Store	0	0	0	0	0	0	0	0	0
	Crepe Myrtle Asian Market	0	0	0	1	0	0	0	0	1
	Mi Carmelita's Mexican Store	0	0	0	0	0	0	0	0	0
	ALDI	0	0	0	0	0	5	0	0	5
	Food Pyramid	0	0	0	0	0	0	0	0	0
	Other	0	0	0	0	0	0	0	1	1
Total		10	5	0	1	0	5	0	1	22

 Add Stub


		Where would you say you most often buy your groceries?
Where would you say you most often buy your groceries?	Chi Square	88.00*
	Degrees of Freedom	49
	p-value	0.00

\*Note: The Chi-Square approximation may be inaccurate - expected frequency less than 5.



## Running head: FOOD AND INTERNATIONAL STUDENTS


		Did you cook your own meals before coming to the US?					Total
		Never	Sometimes	About half the time	Most of the time	Always	
Did you cook your own meals before coming to the US?	Never	3	0	0	0	0	3
	Sometimes	0	11	0	0	0	11
	About half the time	0	0	3	0	0	3
	Most of the time	0	0	0	3	0	3
	Always	0	0	0	0	2	2
Total		3	11	3	3	2	22

 Add Stub

		Did you cook your own meals before coming to the US?
Did you cook your own meals before coming to the US?	Chi Square	88.00*
	Degrees of Freedom	16
	p-value	0.00

\*Note: The Chi-Square approximation may be inaccurate - expected frequency less than 5.

		Do you cook your own meals after coming to the US?					Total
		Never	Sometimes	About half the time	Most of the time	Always	
Do you cook your own meals after coming to the US?	Never	1	0	0	0	0	1
	Sometimes	0	3	0	0	0	3
	About half the time	0	0	1	0	0	1
	Most of the time	0	0	0	14	0	14
	Always	0	0	0	0	3	3
Total		1	3	1	14	3	22


 Add Stub

		Do you cook your own meals after coming to the US?
Do you cook your own meals after coming to the US?	Chi Square	88.00*
	Degrees of Freedom	16
	p-value	0.00

\*Note: The Chi-Square approximation may be inaccurate - expected frequency less than 5.

## Running head: FOOD AND INTERNATIONAL STUDENTS

		Years living in the US				Total
		0 months-1 year	1-2 years	2-5 years	More than 5 years	
Years living in the US	0 months-1 year	3	0	0	0	3
	1-2 years	0	4	0	0	4
	2-5 years	0	0	6	0	6
	More than 5 years	0	0	0	9	9
Total		3	4	6	9	22


 Add Banner

 Add Stub

		Years living in the US
Years living in the US	Chi Square	66.00*
	Degrees of Freedom	9
	p-value	0.00

\*Note: The Chi-Square approximation may be inaccurate - expected frequency less than 5.

		Gender			Total
		Male	Female	Prefer not to answer	
Gender	Male	9	0	0	9
	Female	0	13	0	13
	Prefer not to answer	0	0	0	0
	Total	9	13	0	22

 Add Ban


 Add Stub

		Gender
Gender	Chi Square	22.00*
	Degrees of Freedom	4
	p-value	0.00

\*Note: The Chi-Square approximation may be inaccurate - expected frequency less than 5.

Running head: FOOD AND INTERNATIONAL STUDENTS

		Marital Status				Total
		Single	Married	Divorced	Widowed	
Marital Status	Single	16	0	0	0	16
	Married	0	6	0	0	6
	Divorced	0	0	0	0	0
	Widowed	0	0	0	0	0
Total		16	6	0	0	22

 Add Banner


 Add Stub

		Marital Status
Marital Status	Chi Square	22.00*
	Degrees of Freedom	9
	p-value	0.01

*\*Note: The Chi-Square approximation may be inaccurate - expected frequency less than 5.*

Age

		Age								Total
		18-20	21-25	26-30	31-35	35-40	41-45	46-50	Older than 50	
Age	18-20	3	0	0	0	0	0	0	0	3
	21-25	0	3	0	0	0	0	0	0	3
	26-30	0	0	9	0	0	0	0	0	9
	31-35	0	0	0	5	0	0	0	0	5
	35-40	0	0	0	0	1	0	0	0	1
	41-45	0	0	0	0	0	1	0	0	1
	46-50	0	0	0	0	0	0	0	0	0
	Older than 50	0	0	0	0	0	0	0	0	0
	Total	3	3	9	5	1	1	0	0	22

 Add Banner

 Add Stub

		Age
Age	Chi Square	110.00*
	Degrees of Freedom	49
	p-value	0.00

*\*Note: The Chi-Square approximation may be inaccurate - expected frequency less than 5.*

## Running head: FOOD AND INTERNATIONAL STUDENTS

Saving Data

		Class Status					Total
		Freshman	Sophomore	Junior	Senior	Graduate Student	
Class Status	Freshman	1	0	0	0	0	1
	Sophomore	0	1	0	0	0	1
	Junior	0	0	1	0	0	1
	Senior	0	0	0	0	0	0
	Graduate Student	0	0	0	0	19	19
Total		1	1	1	0	19	22

Add Banner

Add Stub

		Class Status
Class Status	Chi Square	66.00*
	Degrees of Freedom	16
	p-value	0.00

\*Note: The Chi-Square approximation may be inaccurate - expected frequency less than 5.

Saving Data

		College							Total
		Agricultural Sciences and Natural Resources	Arts and Sciences	Education, Health and Aviation	Engineering, Architecture and Technology	Human Sciences	Spears School of Business	University College	
College	Agricultural Sciences and Natural Resources	2	0	0	0	0	0	0	2
	Arts and Sciences	0	6	0	0	0	0	0	6
	Education, Health and Aviation	0	0	2	0	0	0	0	2
	Engineering, Architecture and Technology	0	0	0	2	0	0	0	2
	Human Sciences	0	0	0	0	1	0	0	1
	Spears School of Business	0	0	0	0	0	6	0	6
	University College	0	0	0	0	0	0	3	3
Total		2	6	2	2	1	6	3	22

Add Banner

Add Stub

		College
College	Chi Square	132.00*
	Degrees of Freedom	36
	p-value	0.00

\*Note: The Chi-Square approximation may be inaccurate - expected frequency less than 5.